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10/657,136	09/09/2003	Young-Wun Song	0630-1833P	1908
2292 7590 04/10/2007 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER VUU, HENRY	
			ART UNIT 2179	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			NOTIFICATION DATE	
3 MONTHS			04/10/2007	
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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Office Action Summary	Application No.	Applicant(s)	
	10/657,136	SONG, YOUNG-WUN	
	Examiner	Art Unit	
	Henry Vu	2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-10 and 12-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-10 and 12-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 – 4, 6 – 10, 12, 13, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humpleman et al. (Pub No. 2001/0038392).

As to independent claim 1, Humpleman et al. teaches:

A method for displaying positions of home network appliances (see e.g., Fig. 7 and para. [0104]; i.e., the user may arrange and group the graphical iconic representation of each device according to the desired placement within a home), comprising: generating an appliance identifier (ICON image – see e.g., para. [0079]; i.e., each icon image is associated with a respective home device) for indicating a type of each home network appliance (home device – see e.g., para. [0079]) connected to a home network (home network – see e.g., para. [0014]; i.e., home devices are connected through a network within a home); setting a position pointer (text line 610 – see e.g., Fig. 7 and para. [0104]) for indicating a position of each home network appliance (see e.g., para. [0104]; i.e., text line 610 is an indicator of where the network appliance is located within the home network); a text object indicating positions of home network appliances (see e.g., Fig. 7 and para. [0104]; i.e., additional text line 610 indicates the position of device images 602), combining a graphic object corresponding to the appliance identifier with the text object

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corresponding to the position combining a graphic object corresponding to the appliance identifier with the text object corresponding to the position pointer (see e.g., Fig. 7; i.e., graphic objects corresponds to device images 602, which are combined with text lines 610 to indicate a position of the network appliance), and displaying combined graphic and text object on a screen (see e.g., Fig. 7; i.e., the combination of text lines 610 and the group of network devices are displayed on device link page 606). Humpleman et al. does not specifically mention reading a text object corresponding to the position pointer from a text library, wherein the text library comprises text objects for indicating positions of home network appliances, but suggest to one skilled in the art that text objects corresponding to position pointers (see e.g., Fig. 7 and para. [0104]; i.e., additional text lines 610 is a user defined text field designating a position, wherein associated home network appliances, such as device images 602, are combined with the additional text 610 to visualize the current position of the network appliance on a display) are read from a text library (see e.g., Fig. 7 and para. [0104]; i.e., it would have been obvious to one of ordinary skill in the art to include a text library for storing the additional text lines 610 because additional text line 610 is user defined for associating a plurality of device images 602). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include reading a text object corresponding to the position pointer from a text library, wherein the text library comprises text objects for indicating positions of home network appliances of Humpleman et al. because having a separate text library for text objects that points to a graphic object results in a more efficient means of memory utilization (i.e., memory has a fixed amount of storage capacity, wherein appending the bits representing the text object to each and every individual graphic object will consume a large amount of memory space. Therefore,

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having a text library that stores the text objects once, and having a pointer pointing to a plurality of graphic objects, will consume less memory space than appending the bits representing a text object to each individual graphic object, thus memory usage will be more efficient).

As to dependent claim 2, Humpleman et al. teaches:

The method of claim 1, wherein the appliance identifier (device image 602 – see e.g., Fig. 7) indicates a model name (logo 604 – see e.g., Fig. 7 and para. [0104]) and a serial number (manufacturer model number – see e.g., para. [0079]; i.e., the manufacturer model number may be included at the bottom of the ICON image) of the home network appliance (home device – see e.g., para. [0079]).

As to dependent claim 3, Humpleman et al. teaches:

The method of claim 1, wherein the appliance identifier includes an identifier for indicating a type of the home network appliance (see e.g., para. [0073]; the device name corresponds to the identifier for indicating a type of home network appliance) and an inherent identifier (unique IP address – see e.g., para. [0088]) for indicating a serial number of the home network appliance (see e.g., para. [0084]; i.e., the unique IP address is associated with the manufacturer model number, which is used to identify a particular home device connected to the home network).

As to dependent claim 4, Humpleman et al. teaches:

The method of claim 1, wherein the position pointer indicates positions (text line 610 – see e.g., Fig. 7 and para. [0104]; i.e., text lines 610 indicates the position of network appliances within a home network) of the different types (see e.g., Fig. 7 and para. [0104]; i.e., link page 606 indicates the position of the appliances, while living room group 608 indicates the different types of network appliances within the living room) and the same type of home network appliances

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(see e.g., Fig. 7; i.e., the name brand Samsung within the living room corresponds to the same name brand residing in Mike's room).

As to dependent claim 6, Humpleman et al. teaches:

The method of claim 1, wherein the displaying (displaying user interface – see e.g., para. [0015]) step displays the combined graphic object and text object (see e.g., Fig. 7 and para. [0104]; i.e., graphic object 604 and 602 are displayed on device link page 606 in association with text lines 610) on the screen (device link page 606 – see e.g., Fig. 7; i.e., device link page 606 combines the textual and graphical object for visual description of home appliances) in order to make a user easily recognize a home network appliance to control (see e.g., para. [0106]; i.e., the graphical user interface (GUI) facilitates sensible and easy selection).

As to independent claim 7, claim 7 differs from claim 1 only in that claim 7 is an apparatus (personal computer – see e.g., para. [0052]) claim, comprising an apparatus used to perform the steps of claim 1. Thus, claim 7 is analyzed as previously discussed with respect to claim 1 above.

As to dependent claims 8, claim 8 differs from claim 2 only in that claim 8 is an apparatus (personal computer – see e.g., para. [0052]) claim, comprising an apparatus used to perform the steps of claim 2. Thus, claim 8 is analyzed as previously discussed with respect to claim 2 above.

As to dependent claims 9, claim 9 differs from claim 3 only in that claim 9 is an apparatus (personal computer – see e.g., para. [0052]) claim, comprising an apparatus used to perform the steps of claim 3. Thus, claim 9 is analyzed as previously discussed with respect to claim 3 above.

As to dependent claims 10, claim 10 differs from claim 4 only in that claim 10 is an apparatus (personal computer – see e.g., para. [0052]) claim, comprising an apparatus used to perform the steps of claim 4. Thus, claim 10 is analyzed as previously discussed with respect to claim 4 above.

As to dependent claims 12, claim 12 differs from claim 6 only in that claim 12 is an apparatus (personal computer – see e.g., para. [0052]) claim, comprising an apparatus used to perform the steps of claim 6. Thus, claim 12 is analyzed as previously discussed with respect to claim 6 above.

As to independent claim 13, Humpleman et al. teaches:

An apparatus (personal computer – see e.g., para. [0052]) for displaying positions of home network appliances (see e.g., para. [0052]; i.e., an interface is provided to the user in order to visually illustrate Fig. 7, which identifies the network appliance and the position of the appliance), comprising: an appliance identifier generating unit (session manager – see e.g., para. [0082]; i.e., the session manager locates the appliance identifier from the ICON image file and generates the image on the user interface) for generating an appliance identifier (ICON image – see e.g., para. [0082]; i.e., each icon image is associated with a respective home device generated by the session manager) by reading an appliance type identifier (see e.g., para. [0082]; i.e., the session manager reads the appliance type identifier by locating the ICON image file of a respective home device by searching for a standard ICON image filename) and an appliance inherent identifier (unique IP address – see e.g., para. [0090]; i.e., the network home appliance broadcasts its information and is extracted) from an appliance characteristics data stream transmitted from a home network appliance (see e.g., para. [0090]; i.e., the home

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network appliance broadcasts its presence and information over the home network when powered on) and linking the appliance type identifier to the appliance inherent identifier (see e.g., Fig. 7; i.e., the identifiers are linked in order to display the interface associated with Fig. 7); a position matching unit (auto-tree builder – see e.g., para. [0098]) for setting a position pointer (text lines 610 – see e.g., Fig. 7 and para. [0104]; i.e., text line 610 is generated and set by the auto-tree builder to determine the position of a network appliance) for indicating a position of the home network appliance (see e.g., Fig. 7) and matching the set position pointer with the appliance identifier of the home network appliance corresponded to the position pointer (see e.g., Fig. 7 and para. [0103] – [0104]; i.e., the user may match the position pointer with the appliance identifier in groups according to the respective home device's placement); and a display unit (screen display unit – see e.g., para. [0052]) for generating a text object for indicating the position pointer matched to the appliance identifier (see e.g., Fig. 7; i.e., the text object corresponds to text lines 610, which indicates the position pointer and appliance identifier), generating a graphic object for indicating the appliance identifier matched to the position pointer (see e.g., Fig. 7; i.e., the graphic object corresponds to device image 602), generating a position indication object by combining the text object with the graphic object (see e.g., Fig. 7) and displaying the position indication object on a screen (see e.g., para. [0061]; i.e., a viewable display is provided to visualize the identifiers).

As to dependent claim 17, Humpleman et al. teaches a positioning matching table set (database – see e.g., para. [0093]) so as to match (see e.g., para. [0093]; i.e., the database compares item-to-item against the previously read database in order to perform updating procedures) the appliance identifier according to the set position pointer (see e.g., Fig. 7 and

para. [0103] – [0104]; i.e., the user may match the position pointer with the appliance identifier in groups according to the respective home device's placement), a graphic library (ICON image file – see e.g., para. [0079]) for storing a graphic object corresponding to the appliance identifier (see e.g., para. [0079]; i.e., the ICON image file stores the images that represents particular types of home appliances), a matching table managing module (DHCP Server 310 – see e.g., para. [0091] for reading the appliance identifier matched to the pertinent position pointer (see e.g., Fig. 11 and para. [0090]; i.e., the home device broadcasts its information over the home network to DHCP Server) by searching the position matching table (database – see e.g., para. [0093]; i.e., the database is compared item-to-item against a previously read database for any differences found) according to a display request signal generated by a user (see e.g., para. [0015]), a storing module for storing the text object and the graphic object (DHCP database 314 – see e.g., para. [0093]; i.e., device information such as text and graphic objects are stored in DHCP database 314), a graphic display module for displaying the position indication object generated in the position indication object generating module on the screen through graphic processing (session page 802 – see e.g., Fig. 10 and para. [0104]; i.e., the position indication object is displayed on session page 802, which corresponds to the position indication object generating module), a position indication object generating module (session manager 802 – see e.g., Fig. 10) for generating a position indicating object (text lines 610 – see e.g., Fig. 7) by combining the text object with the graphic object (see e.g., Fig. 7; i.e., text object corresponds to text lines 610 and graphic objects corresponds to device images 602, which are combined in the living room group 608) stored in the storing module (DHCP database 314 – see e.g., para. [0091]), and a library managing module (session manager – see e.g., para. [0082]) for reading the graphic object (see

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e.g., para. [0082]; i.e., the session manager is responsible for locating the ICON image file of a respective home device to be displayed) for indicating the appliance identifier (see e.g., Fig. 7; device images 602 is displayed to identify the home network appliance) read from the matching table managing module (DHCP Server 310 – see e.g., para. [0091] from the graphic library (ICON image file – see e.g., para. [0079]; i.e., the ICON image file stores the images of home devices and is in communication with DHCP Server 310) and the text object matched to the appliance identifier (see e.g., Fig. 7; i.e., the text object corresponds to text lines 610 and the appliance identifier corresponds to device images 602 which is matched together through group 608). Humpleman et al. does not specifically mention a text library, but suggest a text library comprising text objects for indicating positions of home network appliances, wherein one skilled in the art would appreciate that text objects corresponding to position pointers (see e.g., Fig. 7 and para. [0104]; i.e., additional text lines 610 is a user defined text field designating a position, wherein associated home network appliances, such as device images 602, are combined with the additional text 610 to visualize the current position of the network appliance on a display) are read from a text library (see e.g., Fig. 7 and para. [0104]; i.e., it would have been obvious to one of ordinary skill in the art to include a text library for storing the additional text lines 610 because additional text line 610 is user defined for associating a plurality of device images 602). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include reading a text object corresponding to the position pointer from a text library, wherein the text library comprises text objects for indicating positions of home network appliances of Humpleman et al. because having a separate text library for text objects that points to a graphic object results in a more efficient means of memory utilization (i.e., memory has a

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fixed amount of storage capacity, wherein appending the bits representing the text object to each and every individual graphic object will consume a large amount of memory space. Therefore, having a text library that stores the text objects once, and having a pointer pointing to a plurality of graphic objects, will consume less memory space than appending the bits representing a text object to each individual graphic object, thus memory usage will be more efficient).

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Humpleman et al. (Pub No. 2001/0038392) in view of Kanevsky et al. (Patent No. 6,426,761).

As to dependent claim 14, Humpleman et al. teaches a network interface module (Ethernet – see e.g., para. [0048]) for receiving application characteristics data streams from the home network appliances (see e.g., para. [0048]; i.e., home network 100 uses an Ethernet for receiving audio/video and command/control data streams from the home network appliances for data communication), and a stream processing module (network communication layers – see e.g., para. [0044]) for reading an appliance type identifier and a product inherent identifier (see e.g., para. [0044]; i.e., the home network uses the network communication layers to communicate between different home devices by transmitting data such as the appliance and inherent identifiers) from the received appliance characteristics data stream (see e.g., para. [0046]), and further linking the appliance type identifier with the product inherent identifier (see e.g., Fig. 7). Humpleman et al. further teaches a text library for storing the appliance identifier (see e.g., para. [0091]; i.e., the unique IP address and logical names are stored in the DHCP database), but does not teach a text processing module for adjusting text sizes. Kanevsky et al. teaches a text editor (see e.g., column 2, lines 1 – 4) for adjusting text sizes (see e.g., column 11, lines 54 – 65).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the appliance identifier generating unit of Humpleman et al. with the size adjustment mechanism of Kanevsky et al. because Kanevsky et al.'s text adjustment allows dynamic highlighting of text assisting the reader to quickly comprehend the significance of the document by enlarging the text size of more frequently read text (see e.g., column 11, lines 59 - 65).

Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humpleman et al. (Pub No. 2001/0038392) in view of Kanevsky et al. (Patent No. 6,426,761), and further in view of Ando et al. (Pub No. 2002/0091812).

As to dependent claim 15, Humpleman et al. teaches appliance characteristics data stream (see e.g., para. [0090]; i.e., the home network appliance broadcasts its presence and information over the home network when powered on) received from the network interface module (Ethernet – see e.g., para. [0048]; i.e., home network 100 uses an Ethernet for receiving audio/video and command/control data streams from the home network appliances for data communication), parsing the appliance characteristics data stream (see e.g., Fig. 2 and para. [0044]; i.e., each interface layer is responsible for parsing particular data elements), a generator for reading the appliance type identifier and the product inherent identifier from the appliance characteristics data stream (ReadDHCPDB() – see e.g., para. [0095]; i.e., the ReadDHCPDB() works in conjunction with GENIP, which reads the home appliance information from the data stream). Kanevsky et al. teaches a text editor (see e.g., column 2, lines 1 – 4) for adjusting text sizes (see e.g., column 11, lines 54 – 65), but both Humpleman et al. and Kanevsky et al. do not teach a

buffer for storing the appliance characteristics data stream, a preprocessor, outputting a register signal corresponding to the temporarily stored appliance characteristics data stream. Ando et al. teaches a buffer (ring buffer – see e.g., para. [0055]), a preprocessor (CPU 113 – see e.g., para. [0040]), transmitting source (see e.g., para. [0060]; i.e., the transmission of a registered signal corresponds to the transmission of data on the source side). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the stream processing module of Humpleman et al. as modified by text editor of Kanevsky et al. as with the ring buffer and preprocessor of Ando et al. because the ring buffer of Ando et al. stores the information and address of appliances into a table (see e.g., para [0055]; i.e., the buffer stores the appliance characteristics data stream into a table), and the preprocessor allows the discriminating and managing of appliances (see e.g., para. [0036]).

As to dependent claim 16, Humpleman et al. teaches a position matching table set (database – see e.g., para. [0093]) to record the appliance identifier according a position pointer (see e.g., para. [0093]; i.e., the database is compared to a list, which will perform an update if any new home appliances are added to the home network), an indicating module for indicating the appliance identifier adjusted (session manager – see e.g., para. [0082]; i.e., the session manager determines the appliance identifier) the position pointer set in the position matching table (see e.g., para. [0093]; i.e., the GENIP process 316 periodically reads home appliance information including the position of a device). Humpleman et al. further teaches a position matching module (auto-tree builder – see e.g., Fig. 7 and para. [0100]; the auto-tree builder uses the IP address of the device to indicate the position of a home appliance) for matching the appliance identifier (see e.g., para. [0104]; i.e., the auto-tree builder allows the user to group

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respective home devices) indicated by the indicating module (session manager – see e.g., para. [0082]) to a pertinent position pointer according to a user operational key signal (see e.g., para. [0101]; i.e., the user selects home device button 406 corresponds to the user operational key signal), and a matching table managing module (DHCP Server 310 – see e.g., para. [0091] for distinguishing the home network appliance by recording the appliance identifier (DHCP database 314 – see e.g., para. [0091]; i.e., the DHCP Server 310 assigns unique IP address and logical name for the home device and stores the information in DHCP database 314 to distinguish different home devices) on the position matching table by the position indicator according to the information matched in the position matching module (database – see e.g., para. [0093]; i.e., the database is compared item-to-item against a previously read database for any differences found). Ando et al. teaches a buffer (ring buffer – see e.g., para. [0055]), a preprocessor (CPU 113 – see e.g., para. [0040]), transmitting source (see e.g., para. [0060]; i.e., the transmission of a registered signal corresponds to the transmission of data on the source side).

Response to Arguments

Applicant's arguments with respect to claim 1 – 4, 6 – 10, 12 – 17 have been considered but are moot in view of the new ground(s) of rejection.

Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry Vuu whose telephone number is (571) 270-1048. The examiner can normally be reached on 8-5.

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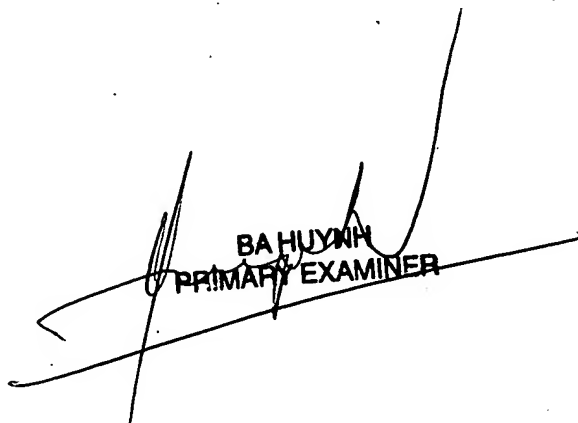
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on (571) 272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Henry Vuu



4/2/2007



BA HUYNH
PRIMARY EXAMINER